

**REMARKS/ARGUMENTS**

Claims 1-15 stand rejected in the outstanding Official Action. Claims 1-15 have been cancelled without prejudice and newly written claims 17-30 offered for consideration. Therefore, claims 17-30 are the only claims remaining in this application.

The Examiner's acceptance of applicant's previously submitted formal drawings is appreciated. Additionally, the acknowledgment of applicant's claim for priority and receipt of the certified copy of the priority document is gratefully appreciated. Finally, the consideration of the prior art submitted in applicant's previous Information Disclosure Statements is appreciated.

Claims 1-9, 11, 12 and 14 stand rejected under 35 USC §102 as being anticipated by Ward (U.S. Patent 5,759,781). While claims 1-9, 11, 12 and 14 have been cancelled without prejudice, the subject matter of claims 1 and 13 has been rewritten into newly written claim 17. Accordingly, it may be helpful to the Examiner to understand the structure and structural interconnections of claim 17 which clearly distinguishes over the Ward reference.

Ward teaches the use of an interferometer to detect fluorescence in a biological sample. Ward does not disclose the use of any additional imaging technique to obtain further data, nor does he disclose that that further data is then combined with the data derived from the interferometer. For example, the Examiner's comments with respect to claim 14 on page 4 of the Official Action are believed to be incorrect. Ward does not disclose a camera "for receiving radiation over the range of wavelengths of interest." In

fact, the camera identified by the Examiner is discussed at column 24, line 63 through column 25, line 33. "The interference pattern or interferogram is most preferably detected with a CCD camera . . . ." One of ordinary skill in the art will appreciate that the output of the interferometer will be a series of fringes and not "radiation from an object space." Newly written claim 28, as did previous claim 14, specifies that the camera receives radiation over the range of wavelengths of interest from the object space, whereas the Ward camera clearly detects the output of the interferometer.

Of course, the Examiner's admission on page 6, section 5 of the Official Action that "Ward does not specifically describe a polarimeter for receiving radiation" clearly prevents the Ward reference from anticipating claim 17 or any claims dependent thereon.

Claim 10 has been cancelled without prejudice, thereby obviating any further rejection under 35 USC §103 over the Ward reference in view of Horton (U.S. Patent 5,777,736). Additionally, and as alluded to above, claims 13 and 15 have been cancelled without prejudice, thereby obviating any future rejection under the Ward reference in view of Fletcher (U.S. Patent 3,977,787). As noted above, claim 13 has been incorporated into newly written independent claim 17.

While the Examiner's admission that Ward does not specifically describe a polarimeter for receiving radiation is very much appreciated, it should also be understood that Fletcher may have been misinterpreted by the Examiner in the previous Official Action. In Fletcher, the interferometer is used to direct a beam into a vacuum chamber in which the sample cell is contained (Fletcher, column 5, lines 15-20). This beam is then

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selectively directed in a series of different directions through the vacuum chamber containing the sample, with the polarimeter measuring the polarization of light through the sample cell and the chamber. However, nowhere in Fletcher, nor in Ward, is there suggested that the polarimeter receive radiation from the same object space.

The Fletcher reference is cited as disclosing the claimed polarimeter, but suffers from the defect noted above. There is no disclosure in Fletcher that both the interferometer and the polarimeter receive radiation from the same object space, nor is there any disclosure that the controller combines data from these two elements in order to create the claimed "score" for each pixel.

In the event the Examiner maintains that the Ward/Fletcher combination teaches or renders obvious the subject matter of claim 17 or any claim dependent thereon, he is respectfully requested to point out precisely where the claimed structures are disclosed in each of the references, and in addition, where there is any suggestion or motivation for combining the structures from these two disparate references.

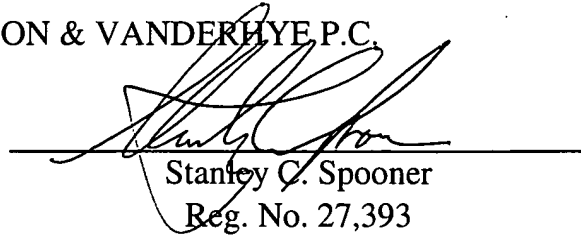
Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that remaining claims 17-30 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact applicant's undersigned representative.

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Respectfully submitted,

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